

## **Experimental Lake Erie Harmful Algal Bloom Bulletin**

29 August, 2016, Bulletin 15

The cyanobacterial (*Microcystis*) bloom is present at low to moderate concentrations on the Michigan coast, extending out to the north and west of West Sister Island. High concentrations and sporadic scums continue in Maumee Bay. The bloom is patchy at low concentrations along the Ohio coast, and is also present in patches east and north of Pelee Island and Pelee Point closer to the Ontario coast. Toxin concentrations are above recreational risk thresholds in Maumee Bay, but low outside of the Bay.

Some mixing today with light mixing Tuesday, and mixing again Wednesday and Thursday. We expect some eastward transport through Tuesday and southerly transport later in the week. Toxin concentrations remain a risk for recreational exposure around Maumee Bay, especially in scums.

The persistent cyanobacteria bloom continues in Sandusky Bay. No other blooms have been detected in the central basin or the eastern basin.

Keep yourself and your pets out of scums. Please check Ohio EPA's site on harmful algal blooms for safety information. http://epa.ohio.gov/habalgae.aspx Thunderstorms remain a greater risk. --Stumpf, Dupuy

The images below are "GeoPDF". To see the longitude and latitude under your cursor, select "Tools > Analyze > Geospatial Location

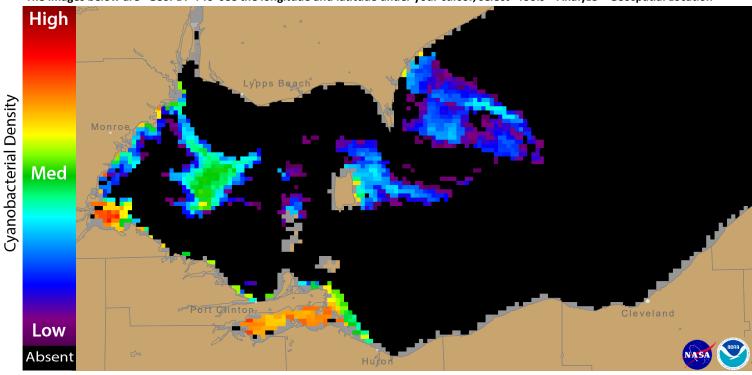


Figure 1. Cyanobacterial Index from NASA's MODIS-Terra data collected 26 August, 2016 at 11:18 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

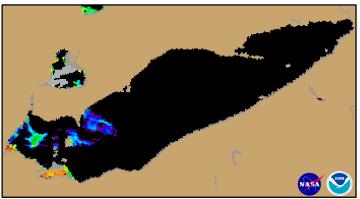
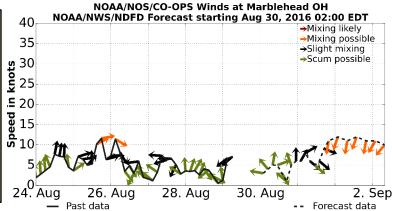


Figure 2. Cyanobacterial Index from NASA's MODIS-Terra data collected 26 August, 2016 at 11:18.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

For more information and to subscribe to this bulletin, go to: http://coastalscience.noaa.gov/research/habs/forecasting

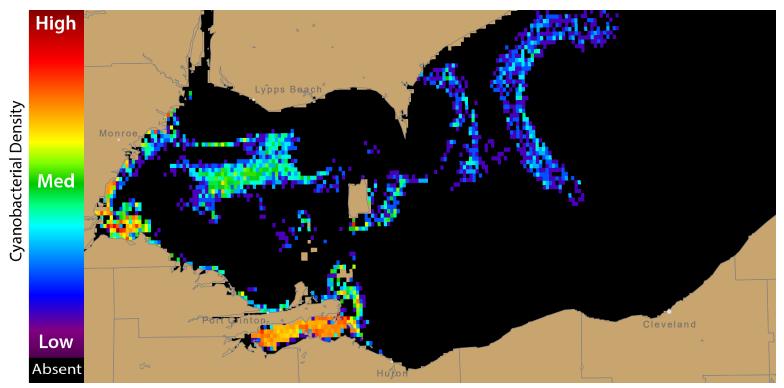


Figure 3. Nowcast position of bloom for 29 August, 2016 using GLFS modelled currents to move the bloom from the 26 August, 2016 image.

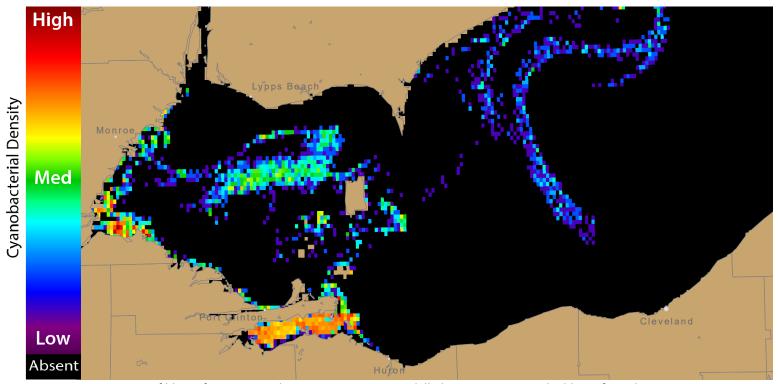
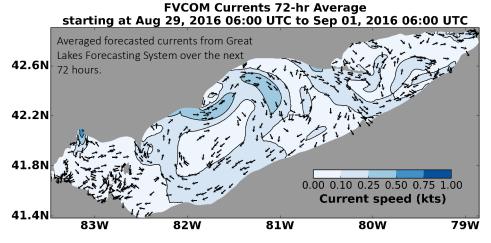


Figure 4. Forecast position of bloom for 01 September, 2016 using GLFS modelled currents to move the bloom from the 26 August, 2016



Produced with Information from NOAA's: National Centers for Coastal Ocean Science Great Lakes Environmental Research Laboratory National Weather Service, Cleveland Center for Operational Oceanographic Products and Services

Additional information from: Great Lakes Observing System Ohio Environmental Protection Agency

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